

KRITSKIY, S.N., doktor tekhn.nauk; LESKOV, G.A., inzh.

Plotting calculated flood hydrographs. Trudy Gidroproektov
no.4:48-54 '60. (Miz. 15:2)
(Ob' River--Hydrography)

LESKOV, G.D.

12

0 A

Luminescence analysis of food products. Technique
and general methods. G. D. Lekov. *Voprosy Fizicheskoy
Khimii*, No. 3, 50-5 (1940).—Use of the quartz lamp in food
analysis is reviewed, with some attention to the influence
of temp., light and other factors. 21 references.
Editor: B. Smirnov

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

SUBJ. NO.		REPORT NO.		CLASS NO.		SERIAL NO.		PUB. NO.		DATE		CITY		COUNTRY		REF. NO.		SEARCHED		INDEXED		FILED	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

LESKOV, R.D.

CA

PROCESSES AND PROPERTIES INDEX

12

Control of fish quality by fluorescence. G. Ia. Leskov. Gipene i Svet, 11, No. 12, 30-3 (1940).—Fluorescence of fish under ultraviolet can be used as a basis for quality control. Fresh fish shows deep-violet fluorescence, with occasional spots of white, blue, or red; occasionally the entire specimen glows with white-blue or deep-green color. The gills of fresh fish show deep-violet color; in spoiled fish this darkens to an indefinite color, which may pass through a red stage. The meat shows greenish blue fluorescence in fresh fish, turning bluer with spoilage. Definite sign of spoilage is white or blue-white fluorescence in sites of skin punctures. Blood of fresh fish does not fluoresce, that of spoiled fish shows red color. The appearance of white-blue spots in the meat is a definite sign of spoilage. Frozen fish often shows red fluorescence of the blood long before other signs of spoilage. Boiling or salting of spoiled fish does not destroy the typical blood fluorescence. G. M. Knoblikoff

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

ECONOMICS

TECHNICAL

SCIENCE

EDUCATION

LITERATURE

ARTS

RELIGION

PHILOSOPHY

PSYCHOLOGY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

PHILOSOPHY

SOCIAL SCIENCES

POLITICAL SCIENCE

HISTORY

ARTS

LITERATURE

EDUCATION

SCIENCE

TECHNICAL

ECONOMICS

ARTS

RELIGION

LYESKOV, G. D.

Luminescent microscopy. Gig. sanit., Moskva no.7:20 July 1951.
(CIML 21:1)

1. Of the All-Union Institute of Nutrition and of the
Department of Nutritional Hygiene, Irkutsk Medical Institute.

2000, 1000.

floor

Luminous control of freshness of filter. Dig. 4 sec. no. 2, 1 sec.

Partial list of Russian agencies, elements of command, organizations, etc.

LESKOV, G. I.

USSR/Engineering - Welding, Equipment

Sep 51

"On Conditions for Passage of the Exterior Characteristics of Welding Transformers Through a Given Point," G. I. Leskov, Engr, Bezhitsa Inst Transport Mach Bldg

"Avtogen Delo" No 9, pp 14, 15

Attempts to analytically establish dependence of variation in inductance of welding circuit on changes in idle voltage under conditions when all exterior characteristics are going through given point. This relationship may facilitate design of automatic regulators of welding circuit inductance in respect to voltage variation in line feeding welding transformer.

202T36

USSR/Engineering - Welding, Processes

May 52

"Instrument for Measuring the Amount of Electricity
and Some Results on Determination of the Melting
Coefficient," G. D. Shevchenko, G. I. Leskov,
Engineers Bezhitsa Inst of Transport Mach Bldg

"Avtogen Delo" No 5, pp 1-4

Describes instrument designed by G. I. Leskov for
detn of melting rate of electrodes in manual
welding. Instrument, named "integrator of current
and voltage;" being based on integrating property

217T36

of capacitor and used jointly with automatic timer,
permitted establishing new regularity in changes
of melting coeff in respect to welding current.

217T36

LESKOV, G. I. (Eng)

Welding

Quicker method of determining the qualification of welders. Avtob. delo 23 No. 7, 1952

9. Monthly List of Russian Accessions, Library of Congress, November 1957, Uncl.

Lemcov, G. I.

Dissertation: "Investigation of the Characteristics of Submerged Arc welding."
Cand Tech Sci, Moscow Order of Labor Red Banner Higher Technical School imeni Kryukova,
31 May 54. Vechernyaya Moskva, Moscow, 21 May 54.

SO: S.M. 284, 26 Nov 1954

LESKOV, G.I.

Potential distribution in open arcs and arcs under flux. Avtom.
svar. 7 no.1:70-77 Ja-F '54. (MLRA 7:?)

1. Bezhitskiy institut transportnogo mashinostroyeniya.
(Electric welding)

AID P - 4829

Subject : USSR/Engineering

Card 1/1 Pub. 11 - 2/13

Author : Leskov, G. I.

Title : Experimental research of certain factors which determine stability of welding arc with fusing agent.

Periodical : Avtom. svar., 3, 17-25, Mr 1956

Abstract : The actuation of an a-c welding arc with fusing agent in the current-interruption periods was observed by the author, who describes his experiments and the results obtained. He finds that in the secondary ignition of the arc the principal role belongs to the liquid fusing film connecting the electrode and the specimen. Seven oscillograms and 1 drawing. Eight Russian references (1948-1954).

Institution : Bezhitsa Institute of Transportation Machine-Building

Submitted : 27 Ag 1955

CLASSIFIED C.I.

Category : USSR/Atomic and Molecular Physics - Liquids

D-8

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 938

Author : Leskov, G.I., Shevchenko, G.D.

Title : Electric Vibration Viscosimeter.

Orig Pub : Zavod. laboratoriya, 1956, 22, No 4, 492-496

Abstract : Description of the construction of a vibration viscosimeter, intended to measure the viscosity of metallurgical and welding slags (1 -- 20 poise). An end piece in the form of a plate or a thin-wall cylinder is placed in the investigated medium and is mechanically coupled with a vibrator (iron rod). The vibrator is in the field of a permanent magnet and is excited by two windings, fed from the a-c line through a ferroresonant voltage stabilizer. The natural frequency of the system is chosen to equal to line frequency. The vibrator windings are connected in opposition to the winding of a differential transformer. The secondary winding of the latter is connected to a recording millivoltmeter. If the vibrator is at standstill the system is balanced, but during vibration the gaps between the vibrator rod and the permanent magnet change periodically and the corresponding change in the inductance destroys the equilibrium in the circuit and the millivoltmeter records a current depending

Card : 1/2

Regulates heat transport. Machine construction.

Category : USSR/Atomic and Molecular Physics - Liquids

D-8

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 938

on the amplitude of the vibrator oscillations. The latter depends uniquely on the viscosity of the liquid, provided the supply voltage is kept constant. The instrument is used for relative measurements and is first calibrated with liquids having viscosities (at different voltages).

Cari : 2/2

LESKOV, G.I.

125-58-5-9/13

AUTHORS: Leskov, G.I., and Pogodin-Alekseyev, G.I.

TITLE: The Thermic Theory of the Electric Arc (Termicheskaya teoriya elektricheskoy dugi)

PERIODICAL: Avtomaticheskaya Svarka, 1958, Nr 5 (62), pp 72-82 (USSR)

ABSTRACT: This is a theoretic discussion of the physical phenomena in the separate sections of the arc between electrodes - the cathode zone, the anode zone, and the arc proper. The theories suggested thus far (by Saga, Khrenov, Rabkin, and others) are discussed. The authors present their own explanations of the phenomena in the anode zone of which little is known. There are 3 figures and 13 references, 11 of which are Soviet and 2 German.

ASSOCIATION: MVTU imeni Bauman

SUBMITTED: August 25, 1957

AVAILABLE: Library of Congress

Card 1/1

66382

25(1) 19.7200

SOV/125-59-12-5/18

AUTHORS: Leskov, G. I. and Zaruba, I. I.

TITLE: Ways of Increasing the Stability of Highly-Effective Welding Arcs

PERIODICAL: Avtomaticheskaya svarka, 1959, Nr 12, pp 34-42 (USSR)

ABSTRACT: Highly-effective welding arcs, which ensure a high fusion coefficient of the electrode, are not stable enough. The author examines the problems connected with this fact and the possibilities of increasing the stability of the arc. After a comprehensive analysis of all the necessary data, he comes to the following conclusion. The repeated ignition of the arc is possible if the plasma temperature has not dropped below the threshold value, which increases with the increase in the effective gas ionization potential. The greater this potential - the greater must be the speed of the voltage rise on the electrodes. Small, strictly dosed out quantities of easily ionizing additives, introduced into the arc, can ensure its stable burning without lowering the fusion coefficient of the

Card 1/2

66382
SOV/125-59-12-5/18

Ways of Increasing the Stability of Highly-Effective Welding Arcs

electrode. As the arc gas containing the mentioned additives cools down, the effective ionization potential decreases and, owing to this, better conditions are created for the ignition of the arc when the polarity of the electrodes is changed. There are 1 diagram, 2 graphs and 11 Soviet references.

ASSOCIATIONS: Bryansk mashinostroitel'nyy institut (Bryansk Machine Building Institute) (G.I. Leskov); Ordona trudovogo krasnogo znameni institut elektrosvarki im. Ye. O. Patona AN UkrSSR (Order of the Red Banner of Labor Institute of Electrical Welding Imeni Ye. O. Paton of the AS UkrSSR) (I.I. Zaruba).

SUBMITTED: July 14, 1959.

4

Card 2/2

26.2311

29046
S/125/61/000/010/003/014
D040/D112

AUTHOR: Leskov, G.I.

TITLE: On the role of thermionic emission and thermal ionization in stabilizing an arc in a CO₂ stream

PERIODICAL: Avtomaticheskaya svarka, no. 10, 1961, 20-29

TEXT: Research was carried out into the magnitude and time of existence of thermionic emission from different cathode materials and the time of deionization of the vapors of easily-ionizing substances in the electrode gap. The role of thermionic emission and thermal ionization of interelectrode gas in the arc excitation process at the start of every half-cycle of alternating current must be clarified in order to increase the stability of the welding arc. Reference is made to publications that illustrate different existing opinions on this matter; it is mostly assumed that the thermoelectronic emission from the cathode determines the re-excitation of the arc. The experimental arrangement (Fig. 1) used, included a welding nozzle from a TCG-2 (TSG-2) welding head and ЭПК (EPK) electro-pneumatic valve, an air cylinder (H), a switch (P) in the arc current circuit, and an oscilloscope. Card 1/5 ✓

On the role of thermionic...

290.6
S/125/61/ccc/010/003/014
D040/D112

The arc was extinguished by compressed air, after which the conductance in the arc gap was probed with current passed through a 125-ohm resistor and recorded. The oscillograms show that the welding current of 120-220 amps was interrupted for periods of $1 \frac{1}{2} \cdot 10^{-3}$ sec and decreased at a rate of $\frac{dI}{dt} = 120,000$ amp/sec; conductance did not disappear immediately after interruptions of the arc. The activating effect of potassium was tested with the use of a K_2CO_3 solution applied to the electrodes or introduced into the

gap on a strip of impregnated fabric. The following conclusions were drawn: (1) a prolonged thermionic emission of about 0.1-0.2 amps, sufficient for re-exciting the arc, exists in the gap after interruptions of arcs having tungsten, graphite and titanium cathodes; (2) the thermionic emission from steel cathodes is not sufficient for restoring the arc discharge after the zero point; re-excitation of a nonactivated arc having a steel cathode at a no-load voltage of 50 v is only possible after interruptions not exceeding 0.0006 sec, during which time the residual ionization of the iron vapors is maintained; (3) when $1 \frac{1}{2} \cdot 1.5\%$ (of the weight of cathode wire) of potassium is

Card 2/5.

29046
S/125/61/000/010/003/014
D040/D112

On the role of thermionic...

introduced into the arc, the conductivity in the gap is maintained for 0.03-0.05 sec due to the continued ionization of the vapors by the heat energy of the electrodes; the arc is thus re-excited after interruptions of up to 0.03-0.04 sec; this explains the stabilizing effect of easily-ionizing vapors; (4) a gas stream directed along the axis of the arc column abruptly reduces the period of existence of the thermionic emission from the cathodes and the time of residual ionization of the gas between the electrodes; the higher the velocity of the gas stream, the greater its deionizing effect; (5) introduction of 1-1.5% K into the arc between steel electrodes ensures stable arc excitation at the start of every half-cycle of alternating current, when the speed of the CO₂ stream does not exceed 3 m/sec and the no-load voltage is 60 V. There are 9 figures, 1 table and 8 references: 7 Soviet and 1 non-Soviet bloc. The reference to the English-language publication reads as follows: A. Lesnewich, Electrode Activation for Inert-Gas Shielded Metal-Arc Welding, "Welding Journal", no. 12, 1955.

Card 3/54

On the role of thermionic...

29046
S/125/61/000/010/003/014
D040/D112

ASSOCIATION: Bryanskij institut transportnogo mashinostroyeniya (Bryansk
Transportation Machinery Institute)

SUBMITTED: March 20, 1961

WT

Card 4151

LESKOV, G.I.

Investigating processes in the arc and the feed sources during passage
of the current through the zero point. Avtom. svar. 16 no.2:43-41 P '63.
(MIRA 16:4)

1. Bryanskij institut transportnogo mashinostroyeniya.
(Electric arc)

LESKOV, G.I.

Approximate equations for calculating the characteristics of
certain welding arcs. Avtom.svar. 16 no.5:62-68 My '63.
(MIRA 16:11)
I. Bryanskiy institut transportnogo mashinostroyeniya.

LESKOV, G.I.

Comparing the dynamic properties of welding transformers. Avtom.
svar. 17 no.1:43-47 Ja '64. (MIRA 17:3)

1. Bryanskij institut transportnogo mashinostroyeniya.

ACC NR: AIP5021962 IWA(c) IJP(c) JD/RM/AT UR/0021/65/000/008/1050/1052

AUTHOR: Lyeskov, H. I. (Leskov, G. I.); Khryenov, K. K. (Khrenov, K. K.) (Academician AN UkrRSR)

TITLE: Processes occurring around a "cold" arc-discharge cathode

SOURCE: AN UkrRSR, Dopovidi, no. 8, 1965, 1050-1052

TOPIC TAGS: arc discharge, cold cathode, field emission, stimulated emission

ABSTRACT: Processes in an arc discharge, particularly on "cold" electrodes, the material of which boils at temperatures insufficient for appreciable thermionic emission, are considered from a new point of view. The existing theories of the electron emission of cold cathodes are criticized for failing to explain some observed phenomena. The positive ion, on approaching the cathode to within 10^{-7} cm, produces near the cathode surface a microfield which destroys the potential barrier, permitting one of the electrons to tunnel its way to the ion. The excited atom produced thereby continues its inertial motion to the cathode. Because of the high energy density of the cathode spot region almost all the atoms radiate photons by stimulated emission. It is pointed out that the cathode spot is a source of coherent radiation of several frequencies. An approximate consideration of the energy balance indicates that about half of the energy supplied to the cathode is used up in melting and evaporation of the cathode material, while the other half covers all the other losses in the cathode region.

Card 1/2

L 1566-66

ACC NR: AP5021962

This rough calculation is in agreement with experimental data for arc welding with a steel electrode. Orig. art. has: 4 formulas.

ASSOCIATION: Instytut elektrozvaryuvannya AN URSR [institut elektrosvarki AN UkrSSR]
(Electric Welding Institute, AN UkrSSR)

SUBMITTED: 12Feb65

ENCL: 00

SUB CODE: EM

NR REF Sov: 001

OTHER: 004

Card 2/2

L 3461-66 EWT(l)/EWT(m)/ETC/EPP(n)-2/EWP(m)/EWP(v)/EPA(w)-2/T/EWP(t)/EWP(k)/EWP(b)/
ACCESSION NR: AP5017206 ^{EWA(c)} ^{LDP(c)} JD/HM/AT UR/0020/65/162/006/1271/1272

AUTHORS: Ieskov, G. I. ^{44, 55}; Khrenov, K. K. ^{44, 55}

⁵⁴
⁵⁰
B

TITLE: Processes occurring at 'cold' cathodes of an arc discharge

SOURCE: AN SSSR. Doklady, v. 162, no. 6, 1965, ^{21, 44, 55} 1271-1272

TOPIC TAGS: electric arc, arc property, cold cathode

ABSTRACT: After mentioning briefly earlier attempts to explain the causes of electron emission from cold cathodes, the material of which boils at temperatures which are insufficient for appreciable thermionic emission (mercury, aluminum, copper, iron, and others), the authors propose to apply to the cathode region of the arc Einstein's theory of induced radiation of atoms, and show that the results are in better agreement with experiment. It had been previously assumed that the excited atoms which move in the arc towards the cathode were incapable of emitting photons. It is shown, however, that the current densities prevailing near the cathodes are such that induced radiation is possible, and this induced radiation is absorbed by the neutral gas,

Card 1/2

L 3461-66

ACCESSION NR: AP5017206

causing the latter to become excited and ionized. This in turn produces a new generation of ions and electrons, which carry the current into the arc column. The energy balance of this process is analyzed and it is shown that the induced radiation and formation of arcs at cold cathodes becomes feasible once a certain initial ion current is produced. For example, the minimum current to produce an arc from a steel cathode is 4 amperes. Orig. art. has: 5 formulas

ASSOCIATION: Institut elektrosvarki im. Ye. O. Patona Akademii nauk UkrSSR (Institute of Electric Welding, Academy of Sciences UkrSSR)

SUBMITTED: 22Jan65

ENCL: 00

SUB CODE: GP, EE

NR REF Sov: 002

OTHER: 003

BVK
Card 2/2

~~L46310-66~~

ACC NR: AP6005334

SOURCE CODE: UR/0413/66/000/001/0072/0072

INVENTOR: Leskov, G. I.

ORG: none

TITLE: Device for stabilizing an a-c welding arc, Class 21,
No. 177573SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki,
no. 1, 1966, 72TOPIC TAGS: ~~a-c welding~~, ~~welding arc stabilization~~, welding equipment,
~~welding~~

ABSTRACT: An Author Certificate has been issued describing a device for stabilizing an a-c welding arc; it contains a power transformer, capacitors, and a unit for controlling the capacitor discharge for the arc gap. For better synchronization of capacitor-produced pulses with arc voltage, the above control unit is supplemented with a differentiating R-C circuit connected in parallel to the arc gap (see Fig. 1).
Orig. art. has: 1 figure.

Card 1/2

UDC: 621.791.75—503.51

L 4 319-66

ACC NR: AP6005334

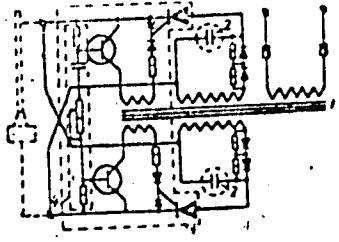


Fig. 1 Device for stabilizing
an a-c welding arc.
1—transformer; 2—capaci-
tor; 3—control unit;
4—differentiating R-C
circuit

[LD]

SUB CODE: 13/

SUBM DATE: 28Apr63

Card 2/2 MILP

51-4-2-6/28

AUTHOR: Leskov, L. V.TITLE: On the Method of Quantitative Gas Analysis Using
Electron-Vibrational Spectra of Diatomic Molecules.
(O metode kolichestvennogo analiza gaza po
elektronnokolebatel'nym spektram dvukhatomnykh
molekul.)PERIODICAL: Optika i Spektroskopiya, 1958, Vol.IV, Nr.2, pp.168-179.
(USSR).ABSTRACT: This paper is entirely theoretical. For atomic spectra the relationship between the intensity of a given spectral line, temperature and concentration of radiating particles is well known. For electron-vibrational spectra of diatomic molecules a similar relationship has not yet been derived. The present paper attempts to find this relationship. The following assumptions are made: (1) the distribution of molecules in electron states is of Boltzmann type with an electron temperature T_e ; (2) the distribution of molecules in vibrational levels is also given by the Boltzmann formula with a vibrational temperature T_v ; (3) temperatures T_e and T_v are constant in the

Card 1/2

On the Method of Quantitative Infrared Analysis of Diatomic Molecules
Vibrational Spectra of Diatomic Molecules.

region considered; (4) re-arrangement of the theory. The relationship is obtained between the vibrational frequencies which it holds are discussed. There are several applications of this relationship in the literature. Bates' tables and "simplified" Morse potential. The relative probabilities are calculated for consideration of the Angstrom and Herzberg system of CO (table 1, 2), the green system of AlO (table 3) and the second infrared system of CaO (table 4). The author thanks Professor V.K. Prokof'ev for his valuable advice, problem and his advice. There are 4 tables, 26 references of which 2 are Soviet, 14 American, 5 German, 1 French and 3 Dutch.

SUBMITTED: April 25, 1957

1. Gases-Quantitative analysis-Theory 2. Diatomic molecules.
Electron-Vibrational spectra-Theory 3. Electron-Motion-Theory

Card 2/2

LESKOV, L.V.; VASIL'YEVA, L.P.

Molecular band spectrum used for temperature measurements. Izv.
AN S.S.R. Ser. fiz. 22, no. 6:696-701 Je '58. (MIRA 11:7)
(Spectrum, Molecular)
(Thermometry)

AUTHORS: Kolesnikov, V. I., Leskov, L. V. 53-65-1-1/1c

TITLE: Optical Transition Probabilities for Atoms and Diatomic Molecules (Verojatnosti opticheskikh perekhodov dlya atomov i dvukhatomnykh molekyl)

PERIODICAL: Uspekhi fizicheskikh nauk, 1958, Vol. 65, Nr 1, pp. 3 - 38 (USSR)

ABSTRACT: The purpose of the present paper was to contribute to the investigation of the gaseous state, this contribution covering, describing and discussing parts of these problems as thoroughly as possible. Thus, the authors gave a comprehensive survey of the range of problems concerning transition probabilities, endeavoring to take into consideration every publication published in all states since 1932, dealing with this field. After a short introduction the optical transition probabilities for atoms are first discussed, viz. the theoretical works starting from the fundamental publications by Kondon and Shortli (Ref 1), Hartree (Khartri) (Ref 2), Bethe (Bete) and Salpeter (Ref 12), Fock (Fok') (Ref 18), further

Card 1/3

53 65 . . . /10

Optical Transition Probabilities for Atoms and Diatomic Molecules

(Refs 13 - 17), as well as the experimental ones (Rozhdestvenskiy, Ref 47; Kvater, Refs 49-50; Bersuker, Ref 51, and others). Further the authors discuss the transition probabilities for electrons in diatomic molecules, again a survey being given first of the theoretical and later on the experimental publications in this field. The most valuable part of this paper consists of four tables extending over 14 pages and containing results from about 300 different publications, being well arranged alphabetically according to elements. All tables contain in a separate column the number of the reference from which the respective information is taken. Table 1 contains data on the configuration and the transitions, respectively, for the following elements: nitrogen (N I - N V), aluminum (Al I - VIII), argon (II - XIV), barium I and II, beryllium (I - IV), boron (I - V), vanadium II and VIII, hydrogen, helium I and II, europium II, iron (I - XV), cadmium I, potassium (I - VI), calcium (I - XV), oxygen (I - VI), silicon (I - VIII), krypton III, xenon III, lithium (I - III), magnesium (I - X), manganese I, V, X, copper I, sodium (I - VI), neon (I - X), nickel (I - XVI), mercury I, rubidium I, sulfur (I - III), scandium (I - VII), strontium I, and II thallium

Card 2/3

53-65-1-1/10

Optical Transition Probabilities for Atoms and Diatomic Molecules

I, titanium II and VII, carbon (I - VI), phosphorus (I - III), fluorine (II - V), chlorine (II - IV), chromium I, IV, IX, cesium I and zinc I. Table II contains the numbers of the investigated lines for approximately the same elements, for the valences I and II only, however, the respective wavelengths (in Å), as well as the investigation methods. Tables III and IV contain data on the electron transitions for diverse diatomic molecules. There are 4 tables and 370 references, 83 of which are Soviet.

1. Perturbation theory--Mathematical analysis

Card 3/3

87544

S/053/60/072/C04/C04/C04
B029/B056*11.6300*AUTHORS: Leskov, L. V., Savin, F. A.

TITLE: Relaxation of Non-equilibrium Gas Systems

PERIODICAL: Uspekhi fizicheskikh nauk, 1960, Vol. 72, No. 4, pp. 741-764

TEXT: This is a review of papers on this subject, the results obtained by various research scientists are compared and the most reliable values of the constants are given. In this, the authors confine themselves to problems of equilibrium adjustment with respect to the translational, rotational, and oscillational degrees of freedom, and also with respect to dissociation and ionization. Only the most important molecules are taken into account. The first part of this article deals with the potential energy of colliding particles. In inelastic collisions (L. Landau and E. Teller, Ref. 27), usually a function for the exponential repulsion:

$V_{exp}(r) = Ae^{-\alpha r}$ is chosen, where α is the range of interaction forces. The second part deals with energy conversion in collision, and in the third part, a quantum-mechanical description of such collisions is given. The

Card 1/3

87544

Relaxation of Non-equilibrium Gas Systems

S/053/60/072/004/004/006
B029/B056

cross sections σ_i of inelastic collisions and also the probabilities $P = \sigma_i / \sigma_e = 1/z$ of inelastic transition in "elastic" collisions may be calculated by quantum-mechanical methods, a classical calculation being insufficient. As an example, the production of oscillations of a diatomic molecule is discussed. Attractive forces in remote action were taken into account by Ye. Ye. Nikitin in a semi-classical study. The next chapters deal with the relaxation of translational, rotational, and oscillational energy, dissociation and ionization, as well as with the methods of determining the relaxation constants. Nine of such methods are enumerated and briefly described. In the last chapter, the relaxation constants are discussed. The following conclusions were drawn from an analysis of the tables: The cross sections of the various elementary processes differ considerably, and the degrees of freedom of gases may be subdivided into "active" (where equilibrium is established after a few collisions) and "inert" degrees of freedom (in which equilibrium is established only after many collisions). The former comprise translational motion and rotation, and the latter oscillations. The relaxation times for the oscillational degrees of freedom and the constants of the reaction

Card 2/3

87544

Relaxation of Non-equilibrium Gas Systems

S/053/E0/072/004/001/000
E029/E056

rates of dissociation depend largely on the gas temperature T. The dissociation rate grows considerably with increasing temperature. The rates of relaxation of the vibrations of nitrogen and of the dissociation of oxygen at 3000°K are of the same order. Within the same temperature range, the production of NO plays an important part, viz., according to the scheme suggested by Ya. B. Zel'dovich: $O_2 \rightleftharpoons 2O$, $C + N_2 \rightleftharpoons NO + N$, $N + O_2 \rightleftharpoons NO + O$. The probabilities of inelastic transitions occurring in collisions depend largely on the nature of the colliding particles. The results obtained by various research workers differ considerably. There are 1 figure, 4 tables and 174 references: 29 Soviet, 136 US, 4 British, 5 German, and 6 Japanese.

X

Card 3/3

ANUFRIYEV, A.A.; LESKOV, L.V.

Optical pyrometry of nonuniform light sources. Opt. i spektr.
16 no.2:325-328 F '64. (MIRA 17:4)

LESKOV, M., kapitan dal'nego plavaniya

Errors in the recognition of coastal markers. Mor. flot
22 no.3:18-20 Mr '62. (MIRA 15:2)
(Aids to navigation)

LESKOV, M.

Navigation

Determining compass correction and location of vessel by the method of consecutive approximation. Sov. flot 13 no. 2, 1953

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Unclassified.

LÈSKOV, M., kapitan dal'nego plavaniya.

Applying the cross-bearing method, Mor. i rech. flot 14 no. 2:8-10
F '54.
(MERA 7:1)
(Navigation)

LISKOV, V. M.

LISKOV, V. M. -- "Determination of the Location of a Point Target from Two Objects." Dissertation for the Degree of Candidate in Technical Sciences. Leningrad, 1956. (Dissertation for the Degree of Candidate in Technical Sciences)

SOURCE: Knizhnaya Letopis', No 4, 1956

LMSKOV, Mikhail Mikhaylovich, kapitan dal'nego plavaniya; GAMOV, A.G.,
otvetstvennyy redaktor; KUZNETSOV, A.D.,redaktor izdatel'stva;
PETERSON, M.M.,tekhnicheskiy redaktor

[Determining ship's position and correcting the compass by two
objects] Opredelenie mesta sudna i poprovki kompassa po dvum
predmetam. Leningrad. Izd-vo "Morskoi transport," 1956. 63 p.
(MLRA 10:5)

(Compass)

BARANOV, Yuriy Konstantinovich, dotsent; LASKOV, Mikhail Mikhaylovich,
dotsent; YUSHCHENKO, Artemiy Pavlovich; KOZHUKHOV, V.P., redaktor;
KUZNETSOV, D.A., redaktor izdatel'stva; PETERSON, M.M., tekhnicheskiy
redaktor

[Modern methods of navigation; a manual for captains] Sovremennye
sposoby navigatsii; uchebnoe posobie kapitanam. Leningrad, izd-vo
"Morskoi transport," 1956. 122 p. (MLRA 10:9)
(Navigation)

LESKOV, H. A.

BUKHANOVSKIY, I.L.; LESKOV, M.M., redaktor; BEGICHEVA, M.N., tekhnicheskiy
redaktor; DIZHUR, I.P., Redaktor izdatel'stva.

[Navigation in narrow waters with the aid of ship's radar; manual
for navigators] Plavanie v stesnennykh vodakh s pomoshch'iu sudovogo
radiolokatora (posobie dlja sudovoditelei). Moskva, Izd-vo "Morskoi
Transport. 1956. 134 p. (Moscow. TSentral'nyi nauchno-issledovatel'-
skii institut ekonomiki i ekspluatatsii vodnogo transporta. Trudy
no.9) (MLRA 10:1)

(Radar in navigation)

LESKOV, M., kapitan dal'nego plavaniya.

Effect of earth rotation on the movement of ships. Mor.flot 17
no.10:17-18 O '57. (MIRA 10:12)

1.Leningradskoye Vyssheye inzhenernoye morskoye uchilishche.
(Navigation)

VASIL'YEV, V., kapitan; LESKOV, M.

Twenty-four thousand miles on the training ship "Tovarishch."
Mor. flot 18 no. 5:4-6 My '58. (MIRA 11:6)

1.Uchebnoye sudno "Tovarishch." 2.Glavnyy rukovoditel' praktiki
(for Leskov).
(Training ships)

LESHOV, M., kapitan dal'nego plavaniya

Navigating with the aid of radar along the line of equal distances.
Mor. flot. 19 no.2:9-12 F '59. (MIRA 12:3)

1. Leningradskoye vyssheye inzhenernoye morskoye uchilishche
im. admirala Makarova.
(Radar in navigation)

LESKOV, M., kapitan dal'nego plavaniya

Necessity of developing braking devices for merchant
ships. Mor.flot 19 no.12:12-13 D '59. (MIR 13:3)
(Merchant Marine--Safety measures)
(Collisions at sea--Prevention)

BARANOV, Yuriy Konstantinovich; LESKOV, Mikhail Mikhaylovich; YUSHCHENKO,
Artemiy Pavlovich; MATYUSHINA, S.P., red.; LAVRENOVA, N.B.,
tekhn. red.

[Modern methods of navigation] Sovremennye sposoby navigatsii.
Izd.2., ispr. 1 dop. Moskva, Izd-vo "Morskoi transport," 1961.
181 p. (MIRA 14:9)

(Navigation)

LESKOV, M., kapitan dal'nego plavaniya

Remarks on the current sailing of ships. Mor.flot 21 no.1:20
Ja '61. (MIRA 14:6)

1. Dekan sudovoditel'skogo fakul'teta Leningradskogo vysshego
inzhenernogo morskogo uchilishcha im. admirala Makarova.
(Navigation)

LESKOV, M.M., Lieutenant

Tables for the determination of drift angles. Bul. No.
Glav. rev. po bezop. moreplav. no 13:37-33-192. (MCPA 1939)

I. Leningradskoye vystavochnye inzhenernyye uchilishche
im. admirala Makarova.
(Navigation--Tables)

LESKOV, M.M., kand.tekhn.nauk

General case for determining compass corrections by bearings
from two objects. Inform.sbor.TSNIIMF no.60 Sudovozh.i sviaz'
no.15:32-34 '61. (MIRA 16:2)
(Radio compass)

LESKOV, M., kapitan dal'nego plavaniya

General graphic solution of navigation problems by the "insertion"
method using position lines taken at various times. Mor. flot 22
no.10:16-19 0 '62. (MIRA 15:10)

(Navigation)

MIZERNITSKIY, Aleksandr Il'ich, kapitan dal'nego plavaniya, dots.;
YUSHCHENKO, A.P., doktor vojenno-morskikh nauk,
retsenzent; LESKOV, M.V., kand. tekhn. nauk, dots.,
retsenzent; YER'OMLAYEV, G.G., dots., retsenzent; UDALOV, V.I.,
kapitan dal'nego plavaniya, kand. tekhn. nauk, dots., retsen-
zent; SERIKO, G.S., red. izd-va, USANOVA, N.B., tekhn. red.

[Navigation] Navigatsiya. Moskva, Izd-vo "Morskoi transport,"
1963. 526 p. (MIRA 16:9)

(Navigation)

LESKOV, M.

Some conceptions in the recommendations on the use of
radar stations in the 1960 Regulations for the Prevention
of Ship Collisions at Sea. Mor. flot. 24 no.5:15-17 My '64.
(MIRA 18:12)

1. Zaveduyushchiy kafedroy morskogo dela Leningradskogo
vysshego inzhenernogo morskogo uchilishcha im. admirala
Makarova.

BARANOV, Yuriy Konstantinovich; LEOKOV, Mikhail Mikhaylovich;
LEOKOV, O.I., red.

[Collection of problems on the use of radar in the prevention of ship collisions] Sbornik zadach po ispol'zovaniyu radiolokatora dlia preduprezhdeniia stolknoveniiii sudov.
Moskva, Transport, 1964. 60 p. (MIRA 18:6)

LIECKOV, Mikhail Mikhaylovich; GAVRYUK, Mikhail Ivanovich;
MESHKOV, O.I., red.

[Errors of navigation determinations] Oshibki naviga-
tsionnykh opredelenii. Moskva, Transport, 1964. 135 p.
(MIRA 17:10)

L'2227-66 EWT(a) BC

ACC N# AM6003009

Monograph

UR/

Yushchenko, Artemiy Pavlovich; Leskov, Mikhail Mikhailovich

19
18

Navigation (Navigatsiya) Moscow, Izd-vo "Transport," 1965. 410 p. B-1
illus., bibliog. 15,000 copies printed. A textbook for higher naval engineering institutes of the Ministry of the Merchant Marine.

TOPIC TAGS: marine engineering, navigation, ship navigation, ship navigation equipment, ship component, electronic navigation equipment

PURPOSE AND COVERAGE: This textbook is intended for students in higher marine engineering academies and naval schools, and for ship's officers; it may also be used by navigators in the naval merchant fleets. The book contains, in somewhat expanded form, lectures given by the authors to students at the Leningrad higher marine-engineering academy im. S. O. Makarov. Besides the fundamental information on navigation presented in the book, problems involving the use of electronic navigation equipment are examined, and one chapter devoted to economic considerations in navigation is included. In the book, the original conclusions of the authors regarding navigation problems are presented, as are all the most recent achievements of the most prominent specialists in the field. At the

Card 1/5

UDC: 656.6(075.8)

2

L 27227-66

ACC NR: AM6003009 /

request of the authors, chapter XVII and paragraphs 87 and 88 were written by Yu, K. Baranov,

TABLE OF CONTENTS (abridged):

Introduction -- 3

Part One. Basic Concepts -- 19

Ch. I. The terrestrial spheroid -- 19

Ch. II. Basic determinations -- 24

Ch. III. Determination of direction at sea -- 35

Ch. IV. Determination of distance travelled at sea -- 47

Part Two. Cartographic Projections and Nautical Charts -- 61

Ch. V. Theory of cartographic projections -- 61

Card 2/5

L 27227-56

ACC NR: AM6003009

O

Ch. VI. Isogonic cylindrical projection (Mercator) -- 83

Ch. VII. Other types of projections used in navigation -- 105

Ch. VIII. The issuing of nautical charts and the degree of their reliability -- 120

Part Three. Calculation of a Vessel's Course -- 124

Ch. IX. Graphic plot -- 124

Ch. X. Dead reckoning -- 156

Part Four. Visual Means for Determining Vessel Position at Sea -- 165

Ch. XI. The line-of-position method -- 165

Ch. XII. The determination of vessel position by direction measurement -- 179

Ch. XIII. Visual methods for determining vessel position by distance

Card 3/3

L 27227-66

ACC NR: AM6003009

O

measurement -- 199

Ch. XIV. Determination of vessel position by nonsimultaneous line
of position -- 212

Ch. XV. Combined and partial cases of determining vessel position -- 224

Part Five. The Use of Electronic Equipment in Navigation -- 237

Ch. XVI. Determining vessel position by radiobearings -- 237

Ch. XVII. The use of sectored-rotating radiobeacons and radio
ranges -- 257

Ch. XVIII. Determining vessel position with pulsed and phased
systems -- 273

Ch. XIX. The use of radar in determining vessel position at sea -- 303

Part Six. Navigation Under Special Conditions -- 336

Card 4/5

L 27227-66

ACC NR: AM6003009

Ch. XX. Approaching shore from the sea -- 336

Ch. XXI. Navigation in narrow waterways -- 351

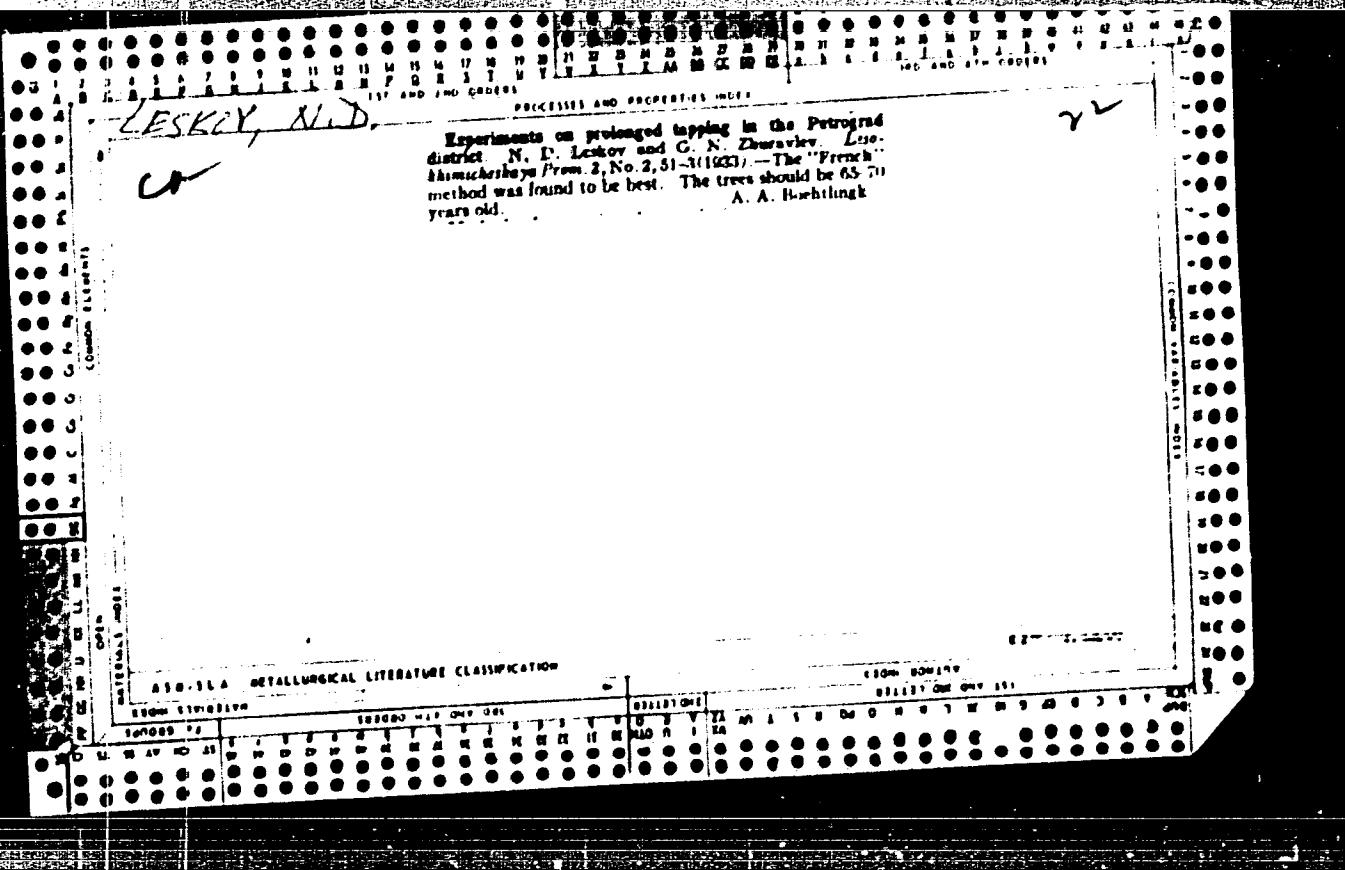
Ch. XXII. Navigation through ice under conditions of limited visibility -- 377

Ch. XXIII. Sailing by the most suitable routes -- 389

References -- 405

SUB CODE: 09, 13, 17/ SUBM DATE: 03Sep65/ ORIG REF: 024/

Card 5/5 CP



Leskov, N.D.

K.

USSR/Forestry - Forest Cultivation.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15385

Author : N.D. Leskov

Inst : The Ural Technical Forestry Institute.

Title : Peculiarities in the Assized Characteristics of the Leading Types of Spruce and Fir Forests of the South Western Timberland of Sverdlovskaya Oblast'.
(Osobennosti taksonomicheskikh kharakteristik vodushchikh tipov lesa yelovo-pikhtovykh nasazhdeniy yugo-zapadnykh leshozov Sverdlovskoy oblasti).

Orig Pub : Sb. tr. po lesn. kh-vu. Ural'skiy lesotekhn. in-t,
1956, vyp. 3, 51-60.

Abstract : Resulting from three years study of three types of forest: the spruce forest with oxalidaceae and mixed grasses, the spruce forest with large ferns, and spruce

Card 1/3

22

USSR/Forestry - Forest Cultivation.

K.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15385

this regularity. Regularities are not found in the changes in completeness and stores. Tables and graphs are presented which illustrate the dynamics and modifications in the various assized indices.

Card 3/3

27

K-2

USSR / Forestry. Dendrology.

Ab^r Jour: Ref Zhur-Biol., No 6, 1958, 24078.

Author : Leskov, N. D.

Inst : Not given.

Title : Features of the Character of Forest Evaluation and
of the Structure of Biogroups in the Species of
Berry Woods.

Orig Pub: Sb. tr. po lesn. kh-vu. Ural'skiy lesotekhn. in-t,
1956, vyp. 4, 35-42.

Abstract: An investigation of full plantings was made in the Ural educational-experimental forest. Through repeated tests, 523 biological groups were chosen. It was ascertained that with increase of age, the number of trees in the biological group decreases almost twice as much with increase of its average area. The accretion by diameter also diminishes,

Card 1/3

27

LESKOV, O.V.; YAVOYS'KIY, V., redakter; GOLOVCHENKO, G., tekhnicheskiy
redakter.

[Advanced steel-making methods] Perevodi metody varky stali.
Kyiv, Derzh. vyd-vo tekhnicheskoi lit-ry Ukrainskoy SSR, 1951, 30 p.
(MLRA 9:6)
[Microfilm]
(Steel--Metallurgy)

PALEYEVA, Yevdokiya (g.Lakhodka); LISKOV, S.; SHITS, O. (s.Nizhnyaya
Omra, Komi ASSR)

Readers reply to Valia Mitiukova. Obshchestv.pit. no.4:30-31
Ap '61. (MIRA 14:3)

1. Zaveduyushchiy proizvodstvom stolovoy No.27, g.Khabarovsk (for
Leskov).
(Cooking schools)

LESKOV, S.A.

Isolation of Middle Paleozoic intrusions in the northern Tien Shan. Inform.sbor.VSEGEI no.46:103-107 '61. (MIRA 15:3)
(Tien Shan--Rocks, Igneous)

GRIGOR'YEV, K.A.; KOTYAKOV, V.I.; LASHOV, S.M.; M. I. T. . . .

Uranium and some other elements in the soils of the northern
Tien Shan. Trudy VSEGM 95:141-148 1965.

URSS 1965

TORGONSKIY, Mikhail Nikolayevich, kandidat tekhnicheskikh nauk; TITOV, P.V.,
inzhener, ofitsial'nyy retsenzent; LESKOV, T.N., inzhener, ofitsial'-
nyy retsenzent; SAMUILLO, V.I., redaktor; PITERMAN, Ye.L., redaktor
izdatel'stva; KARASIK, N.P., tekhnicheskiy redaktor

[Structures for forest roads] Iskusstvennye sooruzheniya lesovoznykh
dorog. Moskva, Goslesbumizdat, 1956. 151 p. (MLRA 9:9)
(Forest roads)

CHUMAK, M.M.; LESKOV, V.A. (Kurskaya oblast')

Work of the feldsher on the collective farm. Fel'd. i akush. 25
no.2:40-43 F '60. (MIRA 13:5)
(KALINOVKA (KURSK PROVINCE)--AGRICULTURAL LABORERS--MEDICAL CARE)

KOZLOV, Yu.M. (Leningrad); LESKOV, V.G. (Leningrad)

Concerning one method for realizing self-adjusting operation
in nonlinear automatic control systems. Izv. AN SSSR, Otd.
tekhn. nauk. Energ. i avtom. no.6:42-46 N-D '61. (MIRA 14:12)
(Automatic control)

S/024/61/000/006/005/01
E140/E355

16.8000

AUTHORS: Kozlov, Yu.M. and Leskov, V.G.

TITLE: On one method of realizing the self-adjustment principle in nonlinear automatic systems

PERIODICAL: Akademiya nauk SSSR. Izvestiya Otdeleniya tekhnicheskikh nauk. Energetika i avtomatika no. 6, 1961, 42 - 46

TEXT: The authors propose to utilize the phenomenon of weak limited-amplitude oscillations in systems close to the boundary of stability, to regulate automatically the loop gain in an automatic-control system. This is, of course, possible only if the oscillations can occur in a narrow band of frequencies in order to detect their presence on the background of random disturbances in the system, using narrow-band filters. There are 3 figures and 5 Soviet-bloc references

SUBMITTED: June 19, 1961

Card 1/1

16.9500 (103, 112, 1132)
9,2530

S/103/61/022/002/012/015
E012/E060

AUTHORS: Leskov, V. G., Chishov, A. I., Chicherin, N. I. (Leningrad)

TITLE: Some diagrams of half-wave (high speed) magnetic amplifiers for servodrives

PERIODICAL: Avtomatika i telemekhanika, v. 23, no. 2, 1961, 250-258

TEXT: A study has been made of three diagrams of magnetic amplifiers displaying certain improvements compared with other known diagrams. The first part of the present paper is devoted to a discussion of a double-branch half-wave magnetic amplifier with a strong capacitive positive feedback. The main elements of the circuit as well as its mode of operation are described with the aid of Fig. 1. If a magnetic amplifier of this kind has a phase-sensitive rectifier circuit as shown by Fig. 3 and as suggested by V. G. Baranovskiy, an output voltage will then be obtained owing to the properties of the magnetic amplifier, one component of which will be proportional to the input signal, while the second component will be proportional to the variation rate of the d-c component of the input voltage of the phase-sensitive rectifier. These properties

Card 1/6

89181

Some diagrams of half-wave ...

S/103/61/022/002/012/015
3010/3060

indicate a good usability for servodrives. The second part deals with two double-branch half-wave magnetic amplifiers with a high Q factor. Magnetic amplifier controls are made by way of a change of the magnetic state of the cores through a change of the d-c component of the magnetic field. In magnetic amplifiers with a positive feedback this task can be solved either by changing magnitude and direction of the current in the control coils or by changing the positive feedback though a change of the rectification factor. The second possibility allows, as shown by tests, working out high-quality magnetic amplifiers. Fig. 4 shows a high-speed, push-pull magnetic power amplifier with a-c output. The respective control is done by changing the internal feedback with the aid of transistors controlling the feedback factor. This circuit has a large power amplification factor (larger than $1.5 \cdot 10^5$), low inertia, ($K_p/\tau = 7.5 \cdot 10^7$, K_p being the power amplification factor, τ the time constant; moreover it is easy to assemble and has a large linear part of the characteristic. A further development of this diagram is shown in Fig. 5. As may be seen, this diagram dispenses with rectifiers in the

Card 2/6

89181

S/103/61/022/002/012/015
B019/B060

Some diagrams of half-wave ...

feedback circuit and replaces them by transistors. After a thorough discussion of the properties of this diagram it is pointed out that the joint use of transistors and magnetic amplifiers permits working out amplifier systems satisfying all requirements regarding operational safety, quick response, minimum weight, and size, provided the amplification factors and output power are sufficiently large. There are 6 figures and 4 Soviet-bloc references.

SUBMITTED: March 4, 1960

Legend to Fig. 1: Two variants of magnetic amplifiers.

Legend to Fig. 3: 1) amplifier according to diagram in Fig. 1a.
(See next card for figs.)

Card 3/6

LESKOV, YU.

Machine-Tractor stations

How the Ramenskiy Machine-tractor Station gets ready for fall and winter repair
MTS. 12, No. 8, 1952

Monthly List of Russian Accessions, Library of Congress, November, 1952 UNCL

Lazarev, Yu.

Collective Farms

Cooperation among brigades. MTS 12 No. 9, 1939.

Monthly List of Russian Acquisitions, Library of Congress, December 1970. Unclassified.

IMSWV, W.

Tillage

Plentiful yield from irrigated land. LTD '8, No. 1, 1958.

Monthly List of Musican Acquisitions, Library of Congress
June 1958. "Incl.

1. LESKOV, Yu.
2. USSR (600)
4. Agricultural Extension Work
7. District agronomist, MTS 13 no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953. Unclassified.

LESKOVA, A., kand. sel'skokhoz. nauk

Virus disease of the apple moth *Hyponomeuta malinellus*. Zashch.
rast. ot vred. i bol. 10 no.5:47 '65. (MIRA 18:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zashchity
rasteniy.

LESKOVA, A.I.

Planning of the shops in locomotive depots. Znel.dor.transp. 46
no.3:85-86 Mr '64. (MIRA 17:3)

1. Starshiy inzh.-ekonomist lokomotivnogo depo Zheleznodorozhnaya
Moskovskoy dorogi.

SYTENKO, L.S. (g. Ussuriysk, Primorskogo kraya); LESKOVA, A.Ya., kand.
mol'skokhozyaystvennykh nauk; PROKHOROVA, K.P.

Experience in using entobacterin. Zashch. rast. ot vred. i bol.
7 no.1:37-38 '62. (MIRA 15:6)

1. Vsesoyuznyy institut zashchity rasteniy (for Leskova).
2. Saveduyushchaya laboratoriyye Voronezhskoy biostantsii
(for Prokhorova).

(Insecticides)

LESKOVA, A. Ya., mladshiy nauchnyy sotrudnik

Bacterial preparation against cabbage pests. Zashch. rast. ot
vred. i bol. 5 no.6:31-32 Je '60. (MIRA 16:1)

1. Vsesoyuznyy institut zashchity rasteniy.

(Cabbage—Diseases and pests)
(Insects, injurious and beneficial—Biological control)

LESKOVA, L.P. (L'vov)

Reorganization of the public health administration in a consolidated rural district. Zdrav. Ros. Feder. 7 no. 8:11 Ag'63.
(MIRA 16:10)

(PUBLIC HEALTH, RURAL)

LESKOVA, L.P.

Organizing medical attendance for children at rural doctors' districts and surgical-obstetric points. Vop. okhr. mat. i det. 6 no.6:53-56 Je '61. (MIRA 15:7)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta okhrany materinstva i detstva (dir. - kand. med. nauk L.Ya. Davydov, rukovoditel' - dotsent I.M. Rudnev).
(PEDIATRICS) (CHILDREN--CARE AND HYGIENE)

LEEEDEV, Andrey Nikolayevich; GINZBURG, R.I., kand. tekhn. nauk,
retsenzent; MAGIN, S.M., inzh., retsenzant; MOZHUKHIN,
N.M., kand. tekhn. nauk, retsenzent; TSEYTLIN, P.A., kand.
tekhn. nauk, retsenzent; TSEYTLIN, Ya.M., nauchnyy red.;
LESKOVA, L.R., red.; ERASOVA, N.V., tekhn. red.

[Modeling of transcendental equations] Modelirovaniye
transcendentnykh uravnenii. Leningrad, Sudpromgiz, 1963.
187 p. (MIRA 16:5)

(Mathematical models)

ARISTOV, Yevgeniy Mikhaylovich; ZORIN, D.I., kand. tekhn.nauk,
retsenzent; KLYUKIN, I.I., retsenzent; MYASNIKOV, L.L.,
prof., nauchn. red.; LESKOVA, L.R., red.; EUSTOVA,
N.V., tekhn. red.

[Physical quantities and units for their measurement]
Fizicheskie velichiny i edinitsy ikh izmerenija. Le-
ningrad, Sudpromgiz, 1963. 94 p. (MIRA 17:1)

PROSTAKOV, Anatoliy Leonidovich; LAPSHIN, V.P., kand. voenno-morsk. nauk, retsenzent; STASHKEVICH, A.P., otv.red.; LESKOVA, L.N., red.

[Underwater acoustics in foreign navies; according to materials of the foreign press] Gidroakustika v inostranniykh flotakh; po materialam zarubezhnoi pechati. Leningrad, Sudostroenie, 1964. 154 p. (MIRA 17:4)

RABINOVICH, Abram Grigor'yevich; VORONTSOV, A.Ye., retsenzent;
NEOFITOV, A.M., retsenzent; OKUN', Ye.L., nauchn. red.;
LESKOVA, L.K., red.

[Adjustment of radio systems] Regulirovka radiotekhnicheskikh
ustroistv. Leningrad, Sudostroenie, 1964. 218 p.
(MIRA 17:5)

PAVLOV, Viktor Vasil'yevich; YAKOVCHUK, N.S., nauchn. red.;
LESKOVA, L.R., red.

[Semiconductor control devices for ship atomic plants]
Poluprovodnikovye upravliaiushchie ustroistva dlia sude-
vykh atomnykh ustanovok. Leningrad, Sudo. stroenie, 1964.
166 p. (MIRA 17:12)

VAYTS, Daniil Moiseyevich; GEORGIANOV, Konstantin Viktorovich;
YAKOBSON, Vladimir Vladimirovich; KARPOV, N.I.,
retsenzent; VORONISOV, A.Ye., nauchn. red.; LESKOVA,
L.R., red.

[Installation of marine radio-engineering equipment]
Montazh sudovoi radiotekhnicheskoi apparatury. Leningrad,
Izd-vo Sudostroenie, 1964. 167 p. (MIRA 17:12)

PESHCHEVITSKIY, B.I.; PTITSYN, B.V.; LESKOVA, N.M.

Hydrolysis of chloroplatinite ion. Izv. Sib. otd. AN SSSR no. 11:
143-145 '62. (MIRA 17:9)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR,
Novosibirsk.

L.SKOVA, Ya.A.

Characteristics of tropospheric jet streams over the Far East.
Trudy Dal'nevost. NIGMI no.14:3-29 '61. (MIR. 10:9)
(Far East) (Jet streams)

JESKOVA, Ye.A.

Some characteristics of jet streams over the northwestern part of
the Pacific Ocean in the summer of 1960. Trudy Dal'nevost. NIGM.
no.14:30-33 '60. (NICA 15:9)
(Pacific Ocean—Jet streams)

STYK, B.; technical assistance: LESKOVA, B.^a JIRISTAGEN^b, Z.

Cofactor and specific antibodies against influenza viruses. I. Method
of cofactor titration. Cofactor content of various animal sera. Acta
virologica. Ed. Praha 5 no. 6: 334-341 N '61.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

(INFLUENZA immunol) (HEMAGGLUTINATION)

LESKOVA, G.-I.

AUTHORS: Leskov, G.I., Flomina, Ye.Ye. 307/32-24-9-14/53
TITLE: Electric Hygrometers (Elektrichekiye vlagomery)
PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 9, pp 1155-1157 (USSR)
ABSTRACT: At present the methods of measuring the electric resistance as well as the capacity are the most spread in measuring the humidity. The latter are more precise as they are based on the important difference of the dielectricity constants between pure water ($\epsilon_w = 81$) and other substances ($\epsilon = 3-5$). Among the many methods of measuring the capacity the high-frequency methods are the most accurate. To work out devices several high-frequency schemes were checked in the present case. Two of them are recommended for measuring the capillary humidity of substances with relatively low electric conductivity. One of the two diagrams given shows a hygrometer operating according to the principle of an oscillation disruption. It contains a quartz generator (with lamp 6S5), an electronic-optical indicator 6E5, and a rectifier (with lamp 6Is5S). The second diagram shows a hygrometer based on "zero-pulsation" and operating according to the principle of "oscillation mixing". This apparatus offers greater possibilities and makes it possible to measure 0,01 g water with an accuracy of $\pm 1\%$. The capacitor-pick-

Card 1/2